

TO: FAA, Regulatory Support Division
Oklahoma City, Oklahoma
ATTN: Manager, Engineering and Manufacturing Branch, AFS-610

Emergency distribution is required.

Send to all U.S. owners and operators of Sikorsky Aircraft Corporation Model S-76 series helicopters.

This Emergency Airworthiness Directive (AD) is prompted by a report of a 20-inch crack in the root end pocket of a main rotor blade and three reports of root end pocket separation of 4 to 6 foot sections of main rotor blades during flight due to improper manufacture of certain main rotor blade skins. This condition, if not corrected, could result in a root end pocket separating and impacting a main rotor or tail rotor blade and subsequent loss of control of the helicopter.

The FAA has reviewed Sikorsky Aircraft Corporation Alert Service Bulletin No. 76-65-50, dated May 25, 2000 (ASB), which identifies certain serial-numbered main rotor blades that need to be removed from service. The ASB also describes performing a visual inspection, implementing a recurring visual inspection of certain serial-numbered main rotor blades for span-wise skin cracks, and removing any main rotor blade with a span-wise crack from service before further flight.

We have identified an unsafe condition that is likely to exist or develop on other Sikorsky Aircraft Corporation Model S-76 series helicopters of the same type design. This AD requires, before further flight, determining the serial number (S/N) of each main rotor blade and accomplishing the following actions in accordance with the ASB described previously:

- Remove any main rotor blade identified by S/N in Group 1 of the ASB Planning Information before further flight.
- Before each flight and at intervals not to exceed 3 hours time-in-service, visually inspect any main rotor blade identified by S/N in Group 2 of the ASB Planning Information for a span-wise crack in the upper and lower root end area. Remove any main rotor blade with a span-wise crack and replace with an airworthy blade before further flight.

Any blade repaired in accordance with the Sikorsky Aircraft Corporation Overhaul and Repair Instructions (ORI) No. 76150-023, Revision A, dated May 26, 2000, is not affected by the requirements of this AD. Accomplishing ORI 76150-023, Revision A, dated May 26, 2000, on each affected blade is terminating action for the requirements of this AD.

This rule is issued under 49 U.S.C. Section 44701 pursuant to the authority delegated to me by the Administrator, and is effective immediately upon receipt of this emergency AD.

Applicability: Model S-76 series helicopters, certificated in any category.

NOTE 1: This AD applies to each helicopter identified in the preceding applicability provision, regardless of whether it has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For helicopters that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (f) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent main rotor blade root end pocket separation, impact with main rotor or tail rotor blades, and subsequent loss of control of the helicopter, accomplish the following:

- (a) Before further flight, determine the serial number of each main rotor blade.
- (b) Any main rotor blade identified in paragraphs (c) or (d) of this AD that has been repaired in accordance with Sikorsky Aircraft Corporation Overhaul and Repair Instructions (ORI) No. 76150-023, Revision A, dated May 26, 2000, and marked as RS-023-1 is not affected by the requirements of this AD.
- (c) Before further flight, remove any main rotor blade identified by serial number (S/N) in the Group 1, paragraph 1.A. Planning Information of Sikorsky Aircraft Corporation Alert Service Bulletin No. 76-65-50, dated May 25, 2000 (ASB).
- (d) Before each flight and at intervals not to exceed 3 hours time-in-service, visually inspect any main rotor blade, identified by S/N in Group 2, paragraph 1.A. of the ASB Planning Information, for a span-wise crack in the upper and lower root end area, in accordance with paragraph 3.B. of the ASB Accomplishment Instructions. Remove any main rotor blade with a span-wise crack and replace with an airworthy blade before further flight.
- (e) Accomplishing ORI 76150-023, Revision A, dated May 26, 2000, on each affected blade is terminating action for the requirements of this AD.

NOTE 2: A crack, other than a span-wise crack, in the root end cap of the main rotor blade should be dispositioned in accordance with the applicable Maintenance Manual.

(f) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Boston Aircraft Certification Office, FAA. Operators shall submit their requests through an FAA Principal

Maintenance Inspector, who may concur or comment and then send it to the Manager, Boston Aircraft Certification Office.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Boston Aircraft Certification Office.

(g) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the helicopter to a location where the requirements of this AD can be accomplished.

(h) Copies of the applicable service information may be obtained from Sikorsky Aircraft Corporation, Attn: Manager, Commercial Tech Support, 6900 Main Street, P. O. Box 9729, Stratford, Connecticut 06497-9129, phone (203) 386-7860, fax (203) 386-4703. This information may be examined at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas.

(i) Emergency AD 2000-11-52, issued May 26, 2000, becomes effective upon receipt.

FOR FURTHER INFORMATION CONTACT: Wayne Gaulzetti, Aviation Safety Engineer, Boston Aircraft Certification Office, 12 New England Executive Park, Burlington, MA 01803, telephone (781) 238-7156, fax (781) 238-7199

Issued in Fort Worth, Texas, on May 26, 2000.